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ABSTRACT

This report presents an evaluation of the HealthWorks! Kids' Museum, an urban education center designed to help children in grades preK-8 understand and make good choices about healthy living and lifestyle choices. It includes an exhibit floor and interactive classroom areas with a program highlighting how body systems work; a game challenging the senses and intelligence; a computer kiosk with health-related questions; a climbing wall that looks like magnified human skin; and video games. The evaluation plan uses multiple data measures, encompassing both content and process concerns, formative and summative assessment, and on-site and off-site activities. Qualitative and quantitative measures are utilized. Data collection includes surveys of the visiting public, teacher evaluations, and artifact reviews. Written documentation regarding all assessment activities are given in an annual report. A summative assessment of all data related to the program is compiled in a longitudinal report. Evaluation documentation are presented to stakeholders at annual meetings. Findings are disseminated to the larger professional health community. Year 1 findings indicate that children enjoy and use the interactive activities and consider them meaningful and fun. Teachers, parents, and community members report increased awareness and knowledge of health issues. An executive summary is appended. (Contains 10 references.) (SM)

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ED 452 161

WHAT MATTERS MOST

HEALTHWORKS! KIDS' MUSEUM
ANNUAL EVALUATION
REPORT OF FINDINGS
YEAR 1 OF 5

JANUARY 31, 2001

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INTRODUCTION

PROGRAM OVERVIEW

HealthWorks! Kids' Museum, which opened on February 12, 2000, is a 12,000 square foot innovative education center located within the Memorial Leighton HealthPlex in downtown South Bend, IN. It is designed to help children in grades PreK-8 understand and make good choices about healthy living and lifestyle choices. The museum is open daily for school groups, and evenings and weekends for community groups and families.

Organizations like ours try to learn from our experiences, both the successful and the not so succesful ones. This is a way of assessing our effectiveness and sharing information.

Phil Newbold
CEO, Memorial Hospital/Health System

The museum was proposed, designed and implemented in response to the needs of the community. Countless community members, volunteers and staff professionals worked with consultants and specialists from across the nation in determining program offerings, exhibit designs, and instructional methods appropriate for the museum.

The museum consists of an exhibit floor and interactive classroom areas. Some features of the HealthWorks! Kids' Museum currently include:

- *BodyWorks!* - highlighting body systems and how they work,
- *The Main Brain* theatre - an exploration into the mind,
- *MindWorks!* - challenging the senses and intelligence,
- *All About Me* - kiosks of computers focusing on health-related questions,
- *The Skin/Crawl Wall* - a professional climbing wall that looks like magnified human skin,
- *Virus Invaders* - a live action video game where one fights off bacteria and viruses,
- *Interactive Video Classrooms* - for demonstrations and group activities, and
- *Resource Center* - offering reference materials for students, teachers and families.

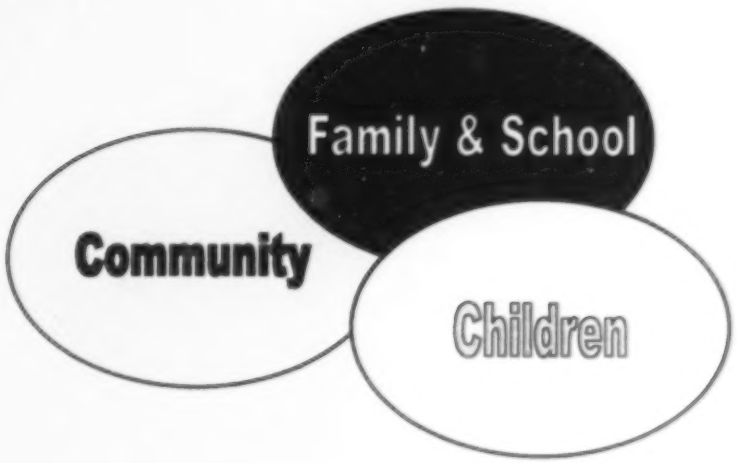
The HealthWorks! Kids' Museum is just one of many community health outreach efforts sponsored by Memorial Health Systems and the Memorial Health Foundation, such as bicycle safety, anti-smoking, and sexual abstinence programs for students in elementary, middle and high schools. The doctors and staff of Memorial Hospital of South Bend have a long and rich history of community involvement within the Michiana region.

The project is sponsored by Memorial Health Systems and the Memorial Health Foundation, along with funding by the Harry and Jeannette Weinberg Foundation, Dennis and Mary Lou Schwartz, James and Julia Schwartz, the Shields and Warner families, the Memorial Hospital Auxiliary, and the Junior League of South Bend.

SPHERES OF INFLUENCE

The founders of HealthWorks! envision an ever widening sphere of influence beginning with the museum activities. It is hoped that once a child attends the museum, she or he will want to share the museum experience with others important in their lives. Thus, it is believed that family members and others at school (i.e. teachers, staff & students) will be made aware of healthy living ideas and opportunities for them in which to share.

Eventually this ever widening sphere of influence would impact the community in positive ways related to healthy living. The diagram below describes this three-tier model of influence, with *Sphere 1* related to children who attend HealthWorks! Kids' Museum, *Sphere 2* consisting of family and school members, and *Sphere 3* representing the larger community of Michiana.



Three Sphere Model of Influence

PROGRAM GOALS

Through much deliberate planning and effort by various oversight committees, program goals were posed, revised and finalized to guide the curricular and instructional efforts of the museum. For example, the following four program goals finalized by the Reach & Teach Advisory Group (RTAG) committee were formally adopted on July 28, 1998 to be part of the evaluation plan. The overriding program goals are:

Children will:

- engage in interactive processes of discovery that will stimulate the curiosity, and result in new exploration, knowledge, and positive attitudes about healthy living,
- be intrigued and empowered to explore the many choices and options they have and will develop the resources and skills to make informed choices in their daily living,
- appreciate the wonder and complexity of the human body, its senses, intelligence and spirit, and
- remember the visit as fun, exciting and meaningful, will extend their exploration of healthy living beyond their experience, and will return with family and friends.

It was the decision of the oversight committees to recommend further program objectives to be written by the HealthWorks! staff as necessary to ensure implementation of the program goals as curricula and program offerings are developed. Currently three distinct program offerings are available for selection by school and community groups visiting HealthWorks! Kids' Museum. Each has distinct written objectives tied to the larger program goals.

Current program offerings in Year 1 of the museum operation are:

Safety: You've Got What It Takes!
Students review common personal safety rules through role-playing, demonstration and games.

Mission Possible: A Healthy Body!
Students investigate nutrition, exercise, rest, and attitude as they strive to uncover the mystery of well-being.

The Amazing Body
Students examine the heart, lungs, brain, bones and muscles to determine which is the body superstar through working on teams.

EVALUATION PURPOSE

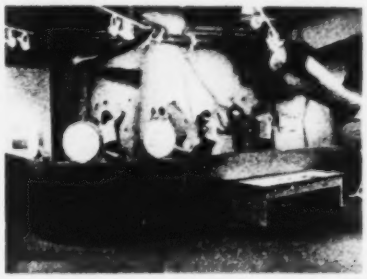
The evaluation purports to assess the extent to which each of the program goals has been met and to also indicate the corresponding merit and worth of the stated goals. Sometimes the evaluation activities are formative in nature, taking place during the actual implementation phase of the project and providing feedback for program improvements. Other evaluation techniques are designed strictly to be summative, occurring at checkpoints along the duration of the project and at the end of the project, thus providing commentary about merit and worth of the program (Worthen & Sanders, 1987).

Ensuring that evaluation activities address both formative and summative aspects of the program being studied is an actual strength of the design of this project and any evaluation study.

EVALUATION PLAN & PROCEDURES

DESIGN OF THE STUDY

A good program evaluation tells a story. If it's told well, it's a story of personal striving, collected efforts and good intentions. Through the story we might come to know the shared vision of an organization, what life is like within a certain community or discover new ideas that can positively impact the lives of others.



Engaged on the Skin Crawl Wall at HealthWorks!

The evaluation and documentation of human activity can be complex, time-consuming, and somewhat messy. For what can be more complex than attempting to document the depth and breadth of intended and unplanned human learning? That is what makes evaluation so intriguing.

A well constructed evaluation plan can document or confirm our research questions, and yet reveal new learnings and new questions that we never even considered. When evaluation studies are conducted in the true spirit of inquiry, insights and new learnings will inevitably occur.

MIXED-METHODS EVALUATIONS

Latest findings from the research community support a mix of qualitative and quantitative data sources when conducting program evaluation research (Frechtling & Sharp, 1997). A mix of both qualitative and quantitative data is being collected to assess the knowledge, behaviors and attitudes of various visitors and groups of individuals that frequent the HealthWorks! Kids' Museum.

This blend of evaluative methodologies yields a rich database that can be used for short-term feedback and formative assessment of various phases of the project, as well as long-term planning and summative assessment of the merit and worth of the museum's activities upon the community (Denzin & Lincoln, 1994).

CONFIRMING EVIDENCE APPROACH

The evaluation plan utilizes a confirming evidence approach to gauge program effectiveness, and provide insight and understanding for continued planning of the partnership activities for the duration of the project. For example, each program goal and research question addressed in the evaluation plan is studied both formatively and summatively, thus providing feedback on current program efforts and also providing recommendations for addressing long-term planning of specific issues and concerns (Patton, 1990).

Each program goal is said to have been achieved or met by *Confirming Evidence*, if and when multiple data measures confirmed same. Program goals and research questions which produce conflicting or differing pieces of data measures are said to produce *Mixed Evidence*, and are deemed inconclusive. *Disconfirming Evidence* is the term used when multiple data measures verifiy that program goals have not been successfully met (Rudy, 1999a; 1999b).

TRIANGULATION

A method of data collection used by many researchers to ensure accurate findings is called triangulation. Basically, triangulation requires that multiple data measures (i.e. minimally three distinct measures) be used to produce evidence related to each of the questions studied or addressed in the evaluation plan (Miles & Huberman, 1984).

For example, if one was interested in verifying whether or not a visit to a museum had significant positive impact on the attitude of a student towards healthy living, more than one piece of evidence would be required to confirm or disconfirm this belief. In this situation one might ask the student to complete a survey regarding healthy living, but also observe how the student chooses to spend his/her time while at the museum along with possibly asking a classroom teacher to corroborate the students' choices in a school setting. This variety and multiplicity of data measures strengthens the validity and reliability of any conjectures ultimately made about the student's attitude toward healthy living.

Logging some miles on a virtual tour in the country via bicycles.

The evaluation plan utilizes triangulation along with the confirming evidence approach as the basis of all evaluation activities.

DATA COLLECTION PLAN

The evaluation plan encompasses both content and process concerns (i.e. health content knowledge and behavior; attitude, instruction), formative and summative assessment (i.e. short-term and long-term planning/feedback), and on-site and off-site activities (i.e. health center and non-museum activities). A myriad of data measures are to be utilized, some naturally occurring in the project environment and some instrumentation that will have to be created and implemented. Remember that triangulation is to be utilized to verify the extent to which program goals are met, so data will be abundant and complex.

Several broad categories of data measures were utilized in data collection and data analyses. Again both qualitative and quantitative measures were utilized to

assess the extent to which program efforts successfully addressed the three foci of students, staff and parents described in the major project goal.

The following performance indicators were selected and deemed appropriate for use in the study by the project staff and oversight committees. The indicators are categorized by the three spheres of influence:

SPHERE 1 CHILDREN
Observations of Students at HealthWorks!
Student Surveys
Student Artifacts
Student Feedback
Student Performance at HealthWorks! and in Related Classroom Activities

SPHERE 2 FAMILY & TEACHERS
Survey of Saturday Visitors
Feedback from Parents/Families Whose Children Attended HealthWorks!
Teacher Surveys
Teacher Artifacts
Teacher Feedback

SPHERE 3 COMMUNITY
Community Surveys
Community Feedback
Community Artifacts
Community Health Related Data (trends, patterns, pre-post)

COHORT GROUP DESIGN

In addition to the data sets described above, a cohort group of frequent visitors to the museum has been planned. This group, composed of students from grades 3 -8 from a neighboring public school district, has committed to visit the museum annually. Data from students attending the museum will be collected based upon student knowledge, attitude and behavior. This data will be collected longitudinally for five years.

In year five of the study this cohort group data will be utilized as a comparison or experimental group for study compared to like groups from within the Michiana region. This data will be analyzed in a pretest-posttest gainscore design, along with other qualitative and quantitative measures to assess the extent to which repeated trips to the museum impact the healthy lifestyles of the community.

INSTRUMENTATION & ANALYSES

Several broad categories of data measures will be utilized in data collection and data analyses. Some of these data measures require the development and

implementation of unique contextually based data collection measures. Some of the data measures include, but are not limited to the following:

1) Teacher/Evaluator OBSERVATION
(e.g. protocol rating sheet; checklist; videotaped lesson)
One example of this data measure is actual observation of students by teacher/evaluator during the activity related to previously established criteria.

2) Teacher/Evaluator REFLECTION
(e.g. teacher judgement; anecdotal records; journal) Measures of teacher reflection may include judgements and comments made about a student's performance and/or level of understanding after an activity/episode has been completed based upon previously stated criteria.

3) Teacher/Evaluator ARTIFACT
(e.g. course syllabus; problem-based learning activity; home web page; attendance record) Some artifacts of choice are items of record produced by the instructor utilized during the teaching and/or learning activity/episode based upon predetermined criteria for student performance.

4) Student/Participant/Museum Visitor REFLECTION
(e.g. student journal; structured interview; survey) Some reflective measures to be considered for use in the study include self-assessment and appraisal of performance and/or level of understanding (prior student training, practice and discussion of assessment criteria is necessary to use this procedure).

5) Student/Participant/Museum Visitor
ARTIFACT

(e.g. contents of a portfolio; lesson plan; essay; criterion-referenced test; group project; concept map). Some examples of student data utilized as artifacts are assessments completed based upon review and analysis of student's actual work; items produced through participation in specific learning activities. Assessment criteria must be established prior to evaluation of materials; portfolios must be available for future reference and data verification (i.e. may be stored on CD-ROM, computer diskette, etc.); concept map completed at the health center or off-site (Ruiz-Primo, Schultz & Shavelson, 1990; Trochim, 1989).

Exploring the now famous pig lungs.

6) Student/Participant/Museum Visitor PEER REVIEW
(e.g. observational checklist; performance rating sheet; feedback from an observer) These data measures include peer-assessment/appraisal of another student's performance and/or level of understanding (prior student training, practice and discussion of assessment criteria is necessary to use this procedure).

The above-mentioned data points will be used to measure various cognitive, attitudinal and behavioral facets of the children and community members who visit the HealthWorks! Kids' Museum.

Again, triangulation of all program goals and research questions will yield multiple data measures. The confirming evidence approach produces documentation verifying one of the following findings for each item of analyses: Confirming Evidence; Mixed Evidence; or, Disconfirming Evidence. This approach is being utilized with qualitative data for it is appropriate and provides the information needed to inform the various stakeholders (Joint Committee on Standards for Educational Evaluation, 1981).

When quantitative data is to be analyzed, an appropriate and suitable statistic of choice will be utilized. The actual methodology employed will be determined by the Evaluation Team, once program goals are finalized and instrumentation concerns are addressed.

VALIDITY & RELIABILITY ISSUES

Appropriateness (Validity)
The appropriateness of the selected qualitative and quantitative assessments and their related administration procedures were reviewed for validity. The qualitative measures were determined to be valid if the utility principle was evidenced (Joint Committee on Standards for Educational Evaluation, 1981). Validity for the quantitative measures was evidenced through face/content documentation provided by the publisher or determined by staff agreement.

In general, the qualitative measures used to gauge project activities are:

- teacher artifacts (e.g. curriculum planning documents; instructional units),
- student artifacts (e.g. samples of student work),
- teacher feedback (e.g. focus group feedback),
- student feedback (e.g. focus group feedback),
- parent feedback (e.g. focus group feedback), and
- community feedback (e.g. focus groups).

The quantitative measures selected and used within the evaluation study included:

- student performance on related knowledge activities,
- student attitude surveys,

- teacher surveys,
- parent surveys.
- community surveys, and
- community indicators of healthy living.

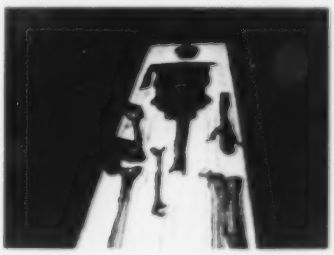
Consistency (Reliability)

Consistency of assessment results over time was used as the operational definition of reliability. For this study, quantitative measures would be deemed reliable if student performance was consistently measured over time. Since this is only year two of a five year study, more quantitative assessment is needed to determine reliability for locally developed criterion-referenced measures (CRT's) and performance assessments (PA's). The standardized norm-referenced assessments (NRT's) have already proven to be both reliable and valid by the publishers.

Regarding qualitative measures, accuracy of results constitutes reliability as defined by the AEA Evaluation Standards (Joint Committee on Standards for Educational Evaluation, 1981). For this study, all qualitative measures were deemed to meet this reliability criterion through staff review and consideration of all assessments utilized in the grant.

EVALUATION ACTIVITIES

The evaluation portion of the grant assesses the extent to which each of the program goals has been met and also indicates corresponding merit and worth of the stated goals. Sometimes the evaluation activities were strictly formative in nature, taking place during an implementation phase of the grant project and providing feedback for program improvements. Other evaluation techniques were designed to be summative in nature, occurring at the end of selected period of time and providing commentary about merit and worth of the program (Worthen & Sanders, 1987). Ensuring that evaluation activities address both formative and summative aspects of the program being studied is an actual strength of the design of the project and the evaluation study.



Sorting bones at the kids' museum.

Again, triangulation of all program goals and research questions resulted in multiple data measures. The confirming evidence approach produced documentation verifying one of the following findings for each item of analyses: Confirming Evidence; Mixed Evidence; or, Disconfirming Evidence.

EVALUATION TIMELINE & REPORTING

The evaluation plan will be written in a formative and summative fashion. Formative evaluation activities will last from 6 months through 1 year, while summative evaluation activities will provide benchmarks at greater intervals of time (2 - 5 years). The project will be broken into phases to better enable that evaluative data be viewed both formally for short-term planning and summatively for long-term evaluation of program worth and merit.

A timeline of evaluation activities follows:

EVALAUATION TIMELINE

Phase 1	Formative Evaluation Year 1 of the Study January, 2000 - December 31, 2000
Phase 2	Summative Evaluation Years 1 & 2 of the Study January, 2000 - August, 2001
Phase 3	Formative Evaluation Year 3 of the Study August, 2001 - August, 2002
Phase 4	Summative Evaluation Years 3 & 4 of the Study August, 2001 - August, 2003
Phase 5	Summative Evaluation Years 1 - 5 of the Study January, 2000 - August, 2004

Annual Reports

Written documentation regarding all assessment activities will be documented in an annual report. This document will contain all formative and summative assessment data related to the program goals and project activities. Data will be displayed in regards to the knowledge, attitudes and behaviors of museum visitors consistent with the philosophy and intent of HealthWorks! Kids' Museum. For example, the first annual report will focus on the themes of The Human Body, Personal Health and Injury Prevention/Safety that reflect the opening day curricula of the HealthWorks! Kids' Museum.

The Evaluation team will be responsible for submitting the annual report each July 1st to the project director of the HealthWorks! Kids' Museum. These reports will be completed and filed annually for the first five years of the project (see chart on Page 14 for additional information).

Longitudinal Reports

In addition to the yearly documentation of all assessment activities found in the annual reports, a summative assessment of all data related to the program goals and project activities will be compiled in a longitudinal report. Data will be displayed in regards to the knowledge, attitudes and behaviors of museum visitors consistent with the philosophy and intent of the HealthWorks! Kids' Museum.

The Evaluation team will be responsible for submitting the longitudinal report on July 31, 2001 at the end of the first two years of the project, and again on July 31, 2004 at the end of the project's fifth year.

Checking out the senses attached to the main brain.

Report to Stakeholders

Besides the written documentation provided through annual and longitudinal reports, the evaluation team will formally present an overview of assessment documentation and findings to all stakeholders at a publicized annual meeting. At this time members of Memorial Health Foundation, Memorial Health Systems and various community groups can dialogue with the evaluation team members regarding issues and concerns. Minutes of the stakeholders meeting will be provided for future use and consideration.

Dissemination Plan

Part of the responsibility of the evaluation team is to disseminate the findings of the study to representatives of the larger professional health community. To fulfill this obligation, the evaluation team will present at regional and annual conferences sponsored by professional organizations representing both the health and education communities. The evaluation team will focus on methodological concerns related to evaluation and also to relevant findings regarding health issues.

These presentations should prove to solidify the role and vision of Memorial Health Systems and the Memorial Health Foundation as leaders within the field of community health education.

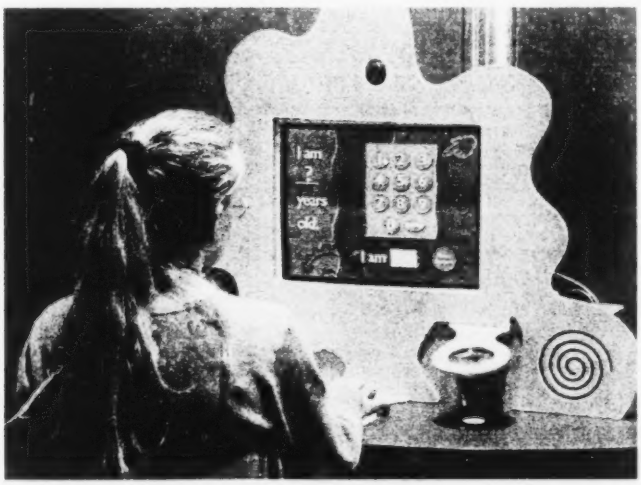
Data Collection Schedule

Clients	Annual Report (formative) February, 2000 - December, 2000	Biennial Report (summative) February, 2000- August, 2001	Annual Report (formative) August, 2001- August, 2002	Biennial Report (summative) August, 2001- August, 2003	Final Report (summative) January, 2000 - August, 2004
Student & Teachers Visiting HealthWorks! (Sphere 1)	Observations, Surveys, Artifacts, Feedback	Observations, Surveys, Artifacts, Feedback	Observations, Surveys, Artifacts, Feedback	Observations, Surveys, Artifacts, Feedback	Observations, Surveys, Artifacts, Feedback
Cohort Group of Repeated Visitors to HealthWorks! (Sphere 1)	Observations, Surveys, Artifacts, Feedback, Performance	Observations, Surveys, Artifacts, Feedback, Performance	Observations, Surveys, Artifacts, Feedback, Performance	Observations, Surveys, Artifacts, Feedback, Performance	Observations, Surveys, Artifacts, Feedback, Performance
Extended Family Members (Sphere 2)		Saturday visitors' survey, Cohort feedback	Random survey feedback	Saturday visitors' survey, Cohort feedback	Random survey feedback
Extended School Members (Sphere 2)		Cohort survey, random feedback, artifacts	Cohort survey, random feedback, artifacts	Cohort survey, random feedback, artifacts	Cohort survey, random feedback, artifacts
Extended Community Members (Sphere 3)			Visitors' survey	Visitors' survey, non-visitors' survey, community indicators	Visitors' survey, non-visitors' survey, community indicators

EVALUATION STANDARDS

The American Evaluation Association (AEA), a professional organization dedicated to implementation and advancement of state of the art evaluative techniques in various settings, has created Program Evaluation Standards. These benchmarks for evaluators are used to ensure that evaluation provides accurate, valid and reliable information that meets the needs of the intended stakeholders. It will be the duty of the evaluation team to ensure that these Standards are fully implemented and utilized as appropriate for the purposes of this project. Major themes of the Program Evaluation Standards include the utility (validity), feasibility, propriety, and accuracy (reliability) of the evaluative activities.

The evaluation plan for this project supports these Standards to ensure that the information provided for the various stakeholders is valid and reliable. It is the duty of the *Evaluation Team* to ensure that these Standards are fully implemented and utilized as appropriate for the purposes of this study. A summary of the Program Evaluation Standards can be found in Appendix A of this document.



Gathering some evidence at the All About Me computer kiosks.

RESULTS

FORMATIVE DATA YEAR 1

During the first year of the study, instrumentation was developed to collect data regarding program implementation issues and concerns. The data was formative in nature, and was intended to provide guidance for the HealthWorks! staff in the daily operation of the museum, along with some sense of progress being made toward attainment of the four program goals.

The data measures collected in Year 1 of the study included:

- ✓ student feedback,
- ✓ student artifacts,
- ✓ student customer satisfaction survey data,
- ✓ teacher feedback,
- ✓ teacher customer satisfaction survey data,
- ✓ cohort group feedback,
- ✓ staff feedback,
- ✓ staff artifacts,
- ✓ attribute data (e.g. attendance figures), and
- ✓ feedback from external evaluators.

CUSTOMER SATISFACTION SURVEY

It was decided to collect formative information about programming at HealthWorks! through a customer satisfaction survey. This survey, designed by various Memorial staff, captures data and feedback related to the following three groups of stakeholders: 1) teachers attending HealthWorks! with their students; 2) students attending HealthWorks! with their school group; and 3) drop-in adult and student visitors.

In Year 1 of the study, it was decided to survey only a portion of the more than 700 schools visiting the museum. A random stratification process was utilized to survey a heterogeneous sampling of the attendees. Actual copies of the surveys can be found in Appendices B & C at the end of this report. The overall design of the survey was a Likert scale using a 1 through 5 rating of various statements related to programming, exhibits usage and staff expertise. An open-ended response format was also utilized to generate feedback related to these and other museum issues.

Teacher response to the items can be found on the page 17 of this report. The five-point Likert score has been transformed to a scaled score, with the mean

	Mean Score	Sample = N
Overall Teacher Survey Rating	94.68	N = 36
Overall How Things Worked Rating	92.50	N = 36
Ease of Finding Way Around	92.36	N = 36
Instructions on the Exhibits	88.19	N = 36
Cleanliness of the Museum	97.92	N = 36
Wait Time to Use Exhibits	92.36	N = 36
Working Order of Exhibits	91.43	N = 35
Overall HealthWorks! Staff Rating	97.57	N = 36
Visibility of Employees	95.14	N = 36
Friendliness of Employees	100.00	N = 36
How Questions Were Answered	97.79	N = 34
How Student Questions Were Answered	98.53	N = 34
Overall Class Rating	97.38	N = 35
Interest Level of Class	95.71	N = 35
Quality of Class Teacher	99.29	N = 35
Subject Matter	97.14	N = 35
Overall Things to Do Rating	91.55	N = 36
How Well Pre-trip Information Prepared You	82.50	N = 30
Interest Level of the Exhibits	94.12	N = 34
Likelihood of Recommending HW! To Others	97.92	N = 36
Knowledge Student Gained	92.14	N = 35

score reported for the sampling of 36 teachers. Responses by teachers were extremely favorable to the museum's programming, exhibit floor and staff. Highest scores were generated for staff efforts and classroom presentations. Some concern was expressed regarding pre-trip information provided for teachers.

	Mean Score	Sample = N
Overall Kids Survey Rating	90.39	N = 524
Overall How Things Worked Rating	86.51	N = 521
Ease of Finding Way Around	90.20	N = 513
Instructions on the Exhibits	88.46	N = 509
Cleanliness of the Museum	91.93	N = 511
Wait Time to Use Exhibits	67.12	N = 501
Working Order of Exhibits	95.78	N = 504
Overall HealthWorks! Staff Rating	92.65	N = 518
Visibility of Employees	88.70	N = 511
Friendliness of Employees	96.53	N = 511
How Questions Were Answered	93.37	N = 483
Overall Class Rating	90.80	N = 515
Interest Level of Class	93.27	N = 505
Quality of Class Teacher	94.49	N = 499
Subject Matter	84.41	N = 489
Overall Things to do Rating	92.25	N = 512
Interest Level of the Exhibits	93.43	N = 506
Quantity of What I Learned	90.81	N = 506
Likelihood of Recommending HW! To Others	92.73	N = 492

The chart on page 18 describes the data produced from the student portion of the customer satisfaction survey. Data related to a randomly stratified sampling of 524 students of the 14, 518 students attending with their school groups in the first year of the museum's opening is provided. Students expressed overall positive comments for their museum experience, with the highest scores related to both HealthWorks! staff and the exhibits themselves. Students had their least positive feedback concerning wait time for use on the exhibit floor.

A comparison of teacher and student responses for the same questions appears in the chart on page 20. It is interesting to note that though teacher and student view of wait times for exhibits differ, extremely positive feelings for overall staff and.program effectiveness do coincide. This is sconfirming evidence that both teachers and students attending HealthWorks! strongly support the appropriateness of the programming offered and the overall staff effort to deliver a fun and exciting way to discuss healthy living.

Open-ended Responses

A sampling of the open-ended response items form the customer satisfaction survey provided the following type of feedback:

FUN

- THE EXHIBITS WERE REALLY FUN.
- THE MUSEUM WAS GREAT. I HAD A BLAST.
- I HAD LOTS OF FUN!

EXHIBITS

- THE EXHIBITS WERE FUN.
- THE EXHIBITS WERE WONDERFUL.
- THE EXHIBITS WERE COOL.

STAFF

- THE PEOPLE WERE NICE AND FRIENDLY.
- I THINK THE EGYPTIAN GUY WAS STRANGE.
- THE PEOPLE ARE VERY HELPFUL.

Overall Feedback

The overall feedback from the open-item responses was also extremely positive towards the staff and museum programming. The chart on page 20 compares the overall ratings by teachers and students attending the museum.

	Mean Score Teachers	Mean Score Students
Overall Survey Rating	94.68	90.39
Overall How Things Worked Rating	92.50	86.51
Ease of Finding Way Around	92.36	90.20
Instructions on the Exhibits	88.19	88.46
Cleanliness of the Museum	97.92	91.93
Wait Time to Use Exhibits	92.36	67.12
Working Order of Exhibits	91.43	95.78
Overall HealthWorks! Staff Rating	97.57	92.65
Visibility of Employees	95.14	88.70
Friendliness of Employees	100.00	96.53
How Questions Were Answered	97.79	93.37
How Student Questions Were Answered	98.53	
Overall Class Rating	97.38	90.80
Interest Level of Class	95.71	93.27
Quality of Class Teacher	99.29	94.49
Subject Matter	97.14	84.41
Overall Things to Do Rating	91.55	92.25
How Well Pre-trip Information Prepared You	82.50	93.43
Interest Level of the Exhibits	94.12	90.81
Likelihood of Recommending HW! To Others	97.92	92.73
Knowledge Student Gained	92.14	

Some of the responses were treated as outliers, since they expressed a viewpoint not confirmed by others. Responses that were able to be chunked into categories portraying a certain theme or concern were duly noted. At this time the sample size of the drop-in visitors survey was deemed insufficient to report. It is hopeful that the data set will be large enough to comment on in the biennial report of August, 2001.

COHORT GROUP FEEDBACK

The cohort group design provides an opportunity to solicit comments and feedback from teachers who have attended the museum on more than one occasion. This group is recognized as a highly credible source for formative assessment feedback used to improve current program offerings and the overall performance of the museum.

During Year 1 of the study, teachers were asked to comment on the relative strengths and challenges of the museum activities, along with comments for future programming. The cohort sample size was 13, and again produced extremely favorable comments for both the museum experience and the staff. The comments were compiled through fax and e-mail responses to structured questions found in Appendix E of this report.

A small sampling of some of the feedback from the cohort teachers is found in the chart below:

CLASSROOM PRESENTATIONS

- VERY ORGANIZED AND INFORMATIVE.
- THE KIDS ARE UP AND MOVING AROUND.
- THE CLASSROOM PROGRAM PRESENTATIONS ARE VERY ENGAGING.

EXHIBITS

- EXCELLENT! GREAT WAY OF HAVING STUDENTS EXPLORE.
- THE EXHIBITS ARE GREAT.
- LOVED THEM!

STAFF

- EVERYONE IS VERY FRIENDLY.
- I FEEL YOU DO A GREAT JOB.
- THE TEACHERS ARE VERY CLEAR AND INFORMATIVE.

STAFF FEEDBACK

Informal commentary from staff on programming and general management of the museum was routinely gathered through monthly staff meetings. Other more formal feedback was illicited after the museum was opened six months and at the end of the first year. The staff comprises a focus group in and of themselves, but their comments and feedback will be tracked and compared with other focus groups noted in the study. Initial feedback from the staff in Year 1 is very positive and staff generally expresses satisfaction as a group. More formal comparison of staff feedback with other focus group is to be completed as part of the biennial report.

ARTIFACT REVIEW

Many students have provided unsolicited feedback through cards, letters and drawings expressing their positive feelings and attitudes about their experience at HealthWorks! These artifacts provide evidence that programming is both fun and interesting to the students. A sampling of student artifacts is always on display at the museum on the wall located behind the front desk. The picture on this page shows a sampling of some of the student artifacts received by the staff on display.

Just some of the thank you notes and letters sent to us by students and proudly displayed at HealthWorks!

EVALUATION REVIEW

The Evaluation Team has formally solicited feedback on planning, implementing and revising the formal evaluation plan for the five years of the study. A meeting was held in Indianapolis, IN in the fall of 2000 to gather commentary on the initial program evaluation proposal. Noted program evaluators from across the nation have shared their expertise and ideas about the five-year study.

Subsequent additions and revisions incorporated in to the study reflect the best practices and thinking of the larger evaluation community. Evaluators continue to be apprised on issues concerning data collection, methodology and data analyses. This dialogue ensures that the evaluation plan is valid and reliable, and also provides for opportunities to envision new ways to envision and conduct program evaluations. In subsequent years of the study, additional input will be formally solicited as needed through external evaluators versed in both health program evaluations and museum studies.

SUMMARY OF FINDINGS

Formative data collected in Year 1 of the study was designed to gather feedback on program implementation and initial feedback for future planning. The data sets included in Year 1 of the study and described previously in this report are:

- Customer satisfaction survey from teachers,
- Customer satisfaction survey from students,
- Staff feedback,
- Cohort teachers group feedback,
- Artifact review, and
- Evaluation review.

Triangulation of these data sets was combined with the confirming evidence approach to gauge the extent to which current program goals have been met. The interpretation of the data is represented in the following chart:

EVIDENCE CHART

Program Goals: Student Focus

Goal	Children participating in HealthWorks! will:	Confirming Evidence	Mixed Evidence	Disconfirming Evidence
1	engage in interactive processes of discovery that will stimulate the curiosity, and result in new exploration, knowledge, and positive attitudes about healthy living,	√		
2	be intrigued and empowered to explore the many choices and options they have and will develop the resources and skills to make informed choices in their daily living,	√		
3	appreciate the wonder and complexity of the human body, its senses, intelligence and spirit, and	√		
4	remember the visit as fun, exciting and meaningful, will extend their exploration of healthy living beyond their experience, and will return with family and friends.	√		

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CLAIM STATEMENTS

Based upon the evidence presented through the formative assessments the following claim statements are said to be true and relevant. These claim statements are categorized by the corresponding spheres of influence. Some sample claim statements from data collected in Year 1 of the study follow:

SPHERE 1 CHILDREN

Confirming evidence exists that children:

- engage in interactive processes of discovery at the museum,
- explore the many choices they have in their daily living,
- appreciate the wonder and complexity of the human body,
- remember the visit as fun, exciting and meaningful, and
- will return with family and friends.

SPHERE 2 FAMILY & SCHOOL

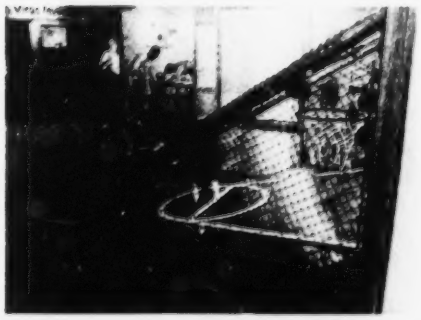
Confirming evidence exists to support:

- teacher, parents & community members have increased awareness and knowledge of health issues through participation at the museum.

SPHERE 3 COMMUNITY

Confirming evidence exists to support:

- the dream of a planned program of interactive and meaningful health education curricula & instruction has been realized.



Hittting the mark with the HealthWorks! exhibits.

CONCLUSIONS & RECOMMENDATIONS

The program staff of HealthWorks! Kids' Museum, Memorial Health Systems and the Memorial Health Foundation are to be commended for envisioning and bringing to fruition a truly interactive museum in which students can explore and discover the choices they face regarding healthy living.

RECOMMENDATION #1

Continue data collection and analyses procedures for formative assessment measures for use in program planning and implementation, such as:

- Customer satisfaction survey from teachers,
- Customer satisfaction survey from students,
- Staff feedback,
- Cohort teachers group feedback,
- Artifact review, and
- Evaluation review.

RECOMMENDATION #2

Refine program goals to include program objectives related to existing and new program offerings.

RECOMMENDATION #3

Begin analyses of summative data collection assessment procedures related to the following data sets:

- student feedback,
- student artifacts,
- student customer satisfaction survey data,
- teacher feedback,
- teacher customer satisfaction survey data,
- cohort group feedback,
- staff feedback,
- staff artifacts,
- attribute data related to HealthWorks! and
- feedback from external evaluators.

RECOMMENDATION #4

Continue collection and tabulation of all attricbute and frequency data archived in the electronic scheduling, classroom voting, and *All About Me* computer kiosks, for sytematic study and long-term summative analyses.

RECOMMENDATION #5

Begin design and collection of community health program indicators for long-term summative analyses.

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APPENDIX A

THE PROGRAM EVALUATION STANDARDS
Summary of the Standards

Utility Standards
The utility standards are intended to ensure that an evaluation will serve the information needs of intended users.

U1 Stakeholder Identification Persons involved in or affected by the evaluation should be identified, so that their needs can be addressed.

U2 Evaluator Credibility The persons conducting the evaluation should be both trustworthy and competent to perform the evaluation, so that the evaluation findings achieve maximum credibility and acceptance.

U3 Information Scope and Selection Information collected should be broadly selected to address pertinent questions about the program and be responsive to the needs and interests of clients and other specified stakeholders

U4 Values Identification The perspectives, procedures, and rationale used to interpret the findings should be carefully described, so that the bases for value judgments are clear.

U5 Report Clarity Evaluation reports should clearly describe the program being evaluated, including its context, and the purposes, procedures, and findings of the evaluation, so that essential information is provided and easily understood.

U6 Report Timeliness and Dissemination Significant interim findings and evaluation reports should be disseminated to intended users, so that they can be used in a timely fashion.

U7 Evaluation Impact Evaluations should be planned, conducted, and reported in ways that encourage follow-through by stakeholders, so that the likelihood that the evaluation will be used is increased.

Feasibility Standards
The feasibility standards are intended to ensure that an evaluation will be realistic, prudent, diplomatic, and frugal.

F1 Practical Procedures The evaluation procedures should be practical, to keep disruption to a minimum while needed information is obtained.

F2 Political Viability The evaluation should be planned and conducted with anticipation of the different positions of various interest groups, so that their cooperation may be obtained, and so that possible attempts by any of these groups to curtail evaluation operations or to bias or misapply the results can be averted or counteracted.

F3 Cost Effectiveness The evaluation should be efficient and produce information of sufficient value, so that the resources expended can be justified.

Propriety Standards
The propriety standards are intended to ensure that an evaluation will be conducted legally, ethically, and with due regard for the welfare of those involved in the evaluation, as well as those affected by its results.

P1 Service Orientation Evaluations should be designed to assist organizations to address and effectively serve the needs of the full range of targeted participants.

P2 Formal Agreements Obligations of the formal parties to an evaluation (what is to be done, how, by whom, when) should be agreed to in writing, so that these parties are obligated to adhere to all conditions of the agreement or formally to renegotiate it.

P3 Rights of Human Subjects Evaluations should be designed and conducted to respect and protect the rights and welfare of human subjects.

APPENDIX A (CONTD.)

P4 Human Interactions Evaluators should respect human dignity and worth in their interactions with other persons associated with an evaluation, so that participants are not threatened or harmed.

P5 Complete and Fair Assessment The evaluation should be complete and fair in its examination and recording of strengths and weaknesses of the program being evaluated, so that strengths can be built upon and problem areas addressed.

P6 Disclosure of Findings The formal parties to an evaluation should ensure that the full set of evaluation findings along with pertinent limitations are made accessible to the persons affected by the evaluation and any others with expressed legal rights to receive the results.

P7 Conflict of Interest Conflict of interest should be dealt with openly and honestly, so that it does not compromise the evaluation processes and results.

P8 Fiscal Responsibility The evaluator's allocation and expenditure of resources should reflect sound accountability procedures and otherwise be prudent and ethically responsible, so that expenditures are accounted for and appropriate.

Accuracy Standards

The accuracy standards are intended to ensure that an evaluation will reveal and convey technically adequate information about the features that determine worth or merit of the program being evaluated.

A1 Program Documentation The program being evaluated should be described and documented clearly and accurately, so that the program is clearly identified.

A2 Context Analysis The context in which the program exists should be examined in enough detail, so that its likely influences on the program can be identified.

A3 Described Purposes and Procedures The purposes and procedures of the evaluation should be monitored and described in enough detail, so that they can be identified and assessed.

A4 Defensible Information Sources The sources of information used in a program evaluation should be described in enough detail, so that the adequacy of the information can be assessed.

A5 Valid Information The information-gathering procedures should be chosen or developed and then implemented so that they will assure that the interpretation arrived at is valid for the intended use.

A6 Reliable Information The information-gathering procedures should be chosen or developed and then implemented so that they will assure that the information obtained is sufficiently reliable for the intended use.

A7 Systematic Information The information collected, processed, and reported in an evaluation should be systematically reviewed, and any errors found should be corrected.

A8 Analysis of Quantitative Information Quantitative information in an evaluation should be appropriately and systematically analyzed so that evaluation questions are effectively answered.

A9 Analysis of Qualitative Information Qualitative information in an evaluation should be appropriately and systematically analyzed so that evaluation questions are effectively answered.

A10 Justified Conclusions The conclusions reached in an evaluation should be explicitly justified, so that stakeholders can assess them.

A11 Impartial Reporting Reporting procedures should guard against distortion caused by personal feelings and biases of any party to the evaluation, so that evaluation reports fairly reflect the evaluation findings.

A12 Metaevaluation The evaluation itself should be formatively and summatively evaluated against these and other pertinent standards, so that its conduct is appropriately guided and, on completion, stakeholders can closely examine its strengths and weaknesses.

APPENDIX B

STUDENT SURVEY QUESTIONS

Kids' Museum

How are we doing Kids? Survey

INSTRUCTIONS: You recently visited HealthWorks! Kids Museum. Please fill in the background questions and then rate your experiences. Circle the number that best represents your feelings. If you had no experience with an item, skip it. Also comment on any negative or positive experiences you might have had in each area. When you have completed the survey, please mail it in the enclosed envelope. THANK YOU!

The date I was at HealthWorks!
Month_____
Day _____
Year _____

I came here with:
A Class from school
Parents
Other_____

I am: ☐ A girl ☐ A Boy

This survey was Filled out:
☐ All by myself
☐ With help from my teacher
☐ With help from a parent
☐ With help from an older child

Time: ☐ Morning (Before noon)
☐ Afternoon

I am _____ years old.

How things worked at HealthWorks!

1. Finding my way to exhibits and other places was.....	Really Hard	1 2 3 4 5	Really easy
2. Instructions on the exhibits were.....	Hard to follow	1 2 3 4 5	Easy to follow
3. HealthWorks! Kids' Museum and the exhibits were.....	Icky dirty	1 2 3 4 5	Super clean
4. Getting my turn to use the exhibits I wanted to took.....	A long time	1 2 3 4 5	No time at all, so much
5. The exhibits I wanted to use were.....	Broken, out of order	1 2 3 4 5	Worked fine

Comments:_____

The People Who Work at HealthWorks!

1. The people at HealthWorks! were.....	Never around	1 2 3 4 5	Always helpful and made time
2. The people who work at HealthWorks! are.....	Not nice at all	1 2 3 4 5	Very Nice & Friendly
3. When I asked the HealthWorks! People questions.....	Got no answer at all	1 2 3 4 5	All my questions were answered

Comments:_____

Overall, the Things to Do at HealthWorks!

1. The exhibits here are.....	Totally boring	1 2 3 4 5	Totally exciting
2. The class we went to was.....	Not very interesting	1 2 3 4 5	Very interesting
3. I think I learned.....	Nothing at all	1 2 3 4 5	Lots
4. How likely am I to recommend HealthWorks! to friends?..	Not at all	1 2 3 4 5	Absolutely

These are the things I liked best at HealthWorks!
_____
_____
_____
_____

The most important thing I learned was:
_____
_____

One thing I will be sure to do to live a healthy life is:
_____
_____

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APPENDIX C

STUDENT PERFORMANCE RECORD SHEET

Individual Record TEACHER

Get a Jump On It! – How high did you jump? _____ inches

Getting the Hang of It – How long Can You Hang? _____

The Beat Goes On – Your high RPMs _____ Your Highest CLS/hour _____

Did you make it all the way across the Skin Crawl Wall without dropping? **YES** **NO** (circle one)

How Fast Can You React? – Place your hand on the table. Press the START button and attach the yardstick to the magnet. Watch the light. Grab the yardstick when it drops. Keep your hand on the table. Circle where your hand grabbed the stick **GREEN YELLOW RED**

What Can You Tell by Touch? – **left box, I guessed 1 2 3 4 5 correctly right box, I guessed 1 2 3 4 5 correctly** (circle)

Healthy Facts Hunt

See how many facts you can find. One point for every correct answer. Not correct without the UNITS, like feet, inches, tons etc

How tall was the shortest man in the world? _____ How many different smells can you nose identify? _____

About how long does it take your body to digest your lunch? _____ What is your biggest organ? _____

How long would it take to smoke all the cigarettes in the chair? _____

How fast can the nerve impulses travel? _____ How many different smells can you nose identify? _____

What is the medical word that means food going down your throat to your stomach? _____

Name the only smell item, at the Remember This Smell station, you should not put in your mouth _____

What would you have if your 'snot' were yellow? _____

Individual Record TEACHER

Balance Challenge – How long can you balance WITHOUT touching the bars? _____

Weigh In & Measure Up – Your height _____ Your weight _____

Inside My Lungs – How Many beats since you were born? _____

Taking Aim – Hit The Hoop – Take 3 shots without the goggles, how many did you make? 1 2 3 (circle one)
Take 3 shots with the goggles, how many did you make? 1 2 3 (circle one)

Virus Invaders – Your score _____ (Mr. Squint had 54)

Did you make it all the way across the Skin Crawl Wall without dropping? **YES** **NO** (circle one)

Healthy Facts Hunt

See how many facts you can find. One point for every correct answer. Not correct without the UNITS, like feet, inches, tons etc

How much food does an average man eat in a lifetime? _____ How tall was the tallest man in the world? _____

Your heart beats more than _____times in one (1) day Can babies see color? **YES** **NO** (circle one)

What might be wrong with you if your 'snot' is green? _____

Could you swallow your food if you were upside down? **YES** **NO** About how long does your food stay in your stomach? _____

What might have a problem if your eyes have a yellowish tinge? _____

At which station can you visit the undersea shipwreck? _____

Other than on your tongue where are taste buds found? _____

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HealthWorks! Kids' Museum

What Matters Most

Annual Report of Findings

Executive Summary
January, 2001

Dennis W. Rudy, Ph.D.
Indiana University South Bend

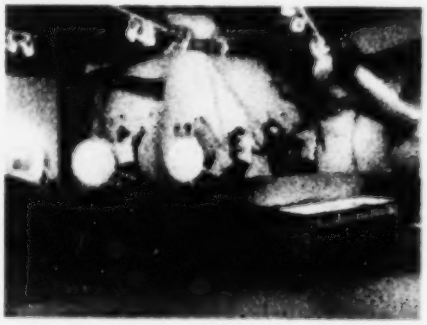
Overview

HealthWorks! Kids' Museum, which opened on February 12, 2000, is a 12,000 square foot innovative education center located within the Memorial Leighton HealthPlex in downtown South Bend, IN. It is designed to help children in grades PreK-8 understand and make good choices about healthy living and lifestyle choices. The museum is open daily for school groups, and evenings and weekends for community groups and families.

The museum was proposed, designed and implemented in response to the needs of the community. Countless community members, volunteers and staff professionals worked with consultants and specialists from across the nation in determining program offerings, exhibit designs, and instructional methods appropriate for the museum.

The museum consists of an exhibit floor and interactive classroom areas. Some features of the HealthWorks! Kids' Museum currently include:

- *BodyWorks!* - highlighting body systems and how they work,
- *The Main Brain* theatre - an exploration into the mind,
- *MindWorks!* - challenging the senses and intelligence,
- *All About Me* - kiosks of computers focusing on health-related questions,
- *The Skin/Crawl Wall* - a professional climbing wall that looks like magnified human skin,
- *Virus Invaders* - a live action video game where one fights off bacteria and viruses,
- *Interactive Video Classrooms* - for demonstrations and group activities, and
- *Resource Center* - offering reference materials for students, teachers and families.



The HealthWorks! Kids' Museum is just one of many community health outreach efforts sponsored by Memorial Health Systems and the

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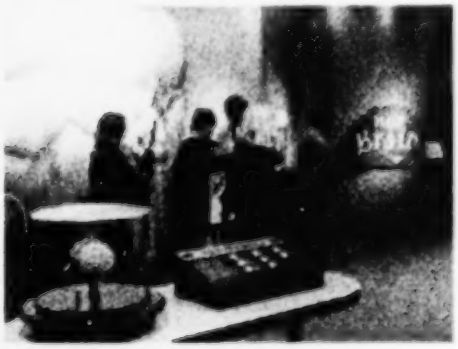
Memorial Health Foundation, such as bicycle safety, anti-smoking, and sexual abstinence programs for students in elementary, middle and high schools. The doctors and staff of Memorial Hospital of South Bend have a long and rich history of community involvement within the Michiana region.

The project is sponsored by Memorial Health Systems and the Memorial Health Foundation, along with funding by the Harry and Jeannette Weinberg Foundation, Dennis and Mary Lou Schwartz, James and Julia Schwartz, the Shields and Warner families, the Memorial Hospital Auxiliary, and the Junior League of South Bend.

Spheres of Influence

The founders of HealthWorks! envision an ever widening sphere of influence beginning with the museum activities. It is hoped that once a child attends the museum, she or he will want to share the museum experience with others important in their lives. Thus, it is believed that family members and others at school (i.e. teachers, staff & students) will be made aware of healthy living ideas and opportunities for them in which to share.

Eventually this ever widening sphere of influence would impact the community in positive ways related to healthy living. The diagram below describes this three-tier model of influence, with *Sphere 1* related to children who attend HealthWorks! Kids' Museum, *Sphere 2* consisting of family and school members, and *Sphere 3* representing the larger community of Michiana.



Confirming Evidence

The evaluation plan utilized a confirming evidence approach to gauge program effectiveness, and provide insight and understanding for continued planning of the partnership activities for the duration of the project. For example, each program goal and research question addressed was reviewed and studied both formatively and summatively, thus providing feedback on current and past project efforts along with recommendations for addressing long-term program planning issues (Patton, 1990; Worthen & Sanders, 1994).

Each program goal was said to have been achieved or met by *Confirming Evidence*, if and when multiple data measures confirmed same. Program goals and research questions which produced conflicting or differing pieces of data measures were said to have produce *Mixed Evidence*, and were deemed inconclusive. *Disconfirming Evidence* was the term used when multiple data measures verified that program goals have not been successfully met (Rudy, 1999a; Rudy, 1999b).

Multiple Assessments

A method of data collection used by many researchers to ensure accurate findings is called triangulation. This procedure requires that multiple data measures (i.e. minimally three distinct measures) be used to produce evidence related to each of the questions addressed in the evaluation plan (Miles & Huberman, 1984; Denzin & Lincoln, 1994). This variety and multiplicity of data measures strengthens the validity and reliability of any conjectures ultimately made regarding progress made toward achieving the program goals. The evaluation plan for this project integrated triangulation with the confirming evidence approach as the base of the evaluation activities. Latest findings from the research community support a mix of qualitative and quantitative data sources when conducting program evaluation research (Frechtling & Sharp, 1997).

DATA COLLECTION PLAN

The evaluation plan encompasses both content and process concerns (i.e. health content knowledge and behavior; attitude, instruction), formative and summative assessment (i.e. short-term and long-term planning/feedback), and on-site and off-site activities (i.e. health center and non-museum activities). A myriad of data measures are to be utilized, some naturally occurring in the project environment and some instrumentation that will have to be created and implemented. Remember that triangulation is to be utilized to verify the extent to which program goals are met, so data will be abundant and complex.

Several broad categories of data measures were utilized in data collection and data analyses. Again both qualitative and quantitative measures were utilized to assess the extent to which program efforts successfully addressed the three foci of students, staff and parents described in the major project goal.

The following performance indicators were selected and deemed appropriate for use in the study by the project staff and oversight committees. The indicators are categorized by the three spheres of influence:

Sphere 1 Children

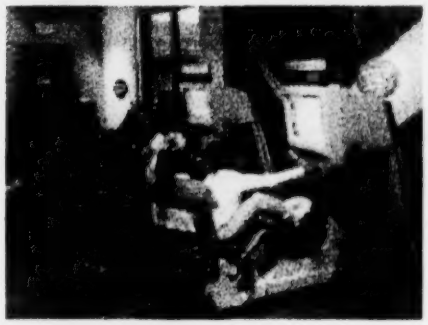
- Observations of Students at HealthWorks!
- Student Surveys
- Student Artifacts
- Student Feedback
- Student Performance at HealthWorks! and in related classroom activities

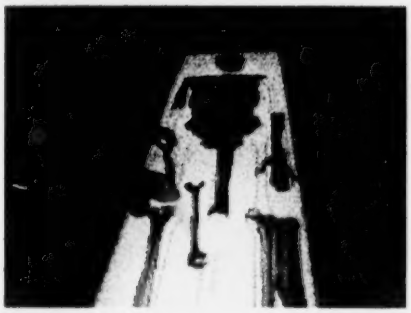
Sphere 2 Family & Teachers

- Survey of Saturday Visitors
- Feedback from Parents/Families Whose Children Attended HealthWorks!
- Teacher Surveys
- Teacher Artifacts
- Teacher Feedback

Sphere 3 Community

- Community Surveys
- Community Feedback
- Community Artifacts
- Community Health Related Data (trends, patterns, pre-posttests)





EVALUATION TIMELINE

Phase 1 Formative Evaluation
Year 1 of the Study
January, 2000 - December 31, 2000

Phase 2 Summative Evaluation
Years 1 & 2 of the Study
January, 2000 - August, 2001

Phase 3 Formative Evaluation
Year 3 of the Study
August, 2001 - August, 2002

Phase 4 Summative Evaluation
Years 3 & 4 of the Study
August, 2001 - August, 2003

Phase 5 Summative Evaluation
Years 1 - 5 of the Study
January, 2000 - August, 2004

FINDINGS & IMPLICATIONS

Some sample claim statements from data collected in Year 1 of the study follow:

Sphere 1 Children

Confirming evidence exists that children:

- engage in interactive processes of discovery at the museum,
- explore the many choices they have in their daily living,
- appreciate the wonder and complexity of the human body,
- remember the visit as fun, exciting and meaningful, and
- will return with family and friends.

Sphere 2 Family & School

Confirming evidence exists to support:

- teacher, parents & community members have increased awareness and knowledge of health issues through participation at the museum

Sphere 3 Community

Confirming evidence exists to support:

- the dream of a planned program of interactive and meaningful health education curricula & instruction has been realized.

WANT MORE INFORMATION?

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PROGRAM OFFERINGS

Current program offerings in the second year of the health museum operation are:

Safety: You've Got What It Takes!
Students review common personal safety rules through role-playing, demonstration and games.

Mission Possible: A Healthy Body!
Students investigate nutrition, exercise, rest, and attitude as they strive to uncover the mystery of well-being.

The Amazing Body
Students examine the heart, lungs, brain, bones and muscles to determine which is the body superstar through working on teams.

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